

PLOUGHING UNDER THE SCIENCE CROP

It is possible that Dr. Campbell in his recent address¹ has begged the question. The "small group of extremists" whom he mentions, advocate, not "the taking of a holiday in scientific research," but a slowing up of research efforts in order that there may be time to discover, not new things, but the meaning of things already discovered. To some the physicist and the chemist seem to be traveling so fast as not to heed or care where or how or why they are going. Nor do they heed or care what misapplications are made of their discoveries.

Indeed, not only in industrial scientific laboratories but also in some, at least, of the laboratories connected with educational institutions, the chief aim of scientific research is to enable those who already receive an undue share of the wealth produced by industry and research, to appropriate a share still larger. And there is a constant and increasing demand from educational institutions for more funds to be used by their scientific laboratories for more research for more applications for more profits for more segregation of wealth.

Is it not time to remember that there are other sciences, psychology, economics, sociology, upon the development of which the welfare of mankind depends far more than upon the development of physics and chemistry? And to remember that the development

of that group of humane sciences would serve to prevent the misapplication of the discoveries of the physical sciences to the hurt, the destruction, the degradation of mankind?

Physics and chemistry boast of the improvement in man's material welfare brought about by their discoveries. True; but for thousands who are so benefited there are millions who are not, because of the distribution of wealth. These can not have even the material benefits of physical science because they can not afford to pay for them. Psychology, economics, sociology, philosophy, if adequately endowed, could alleviate these evils; could, possibly, eliminate them.

The "small group of extremists" demands a readjustment, a realignment, a redistribution of "research" and of "progress," so that man's progress shall be that of a man, not that of an octopus stretching out first one arm, then another; shall be a homogeneous progress of society as a whole; shall be a progress, material to be sure, but to an even greater degree spiritual. These are the things which the "small group" of enthusiasts, idealists demand, even if physics and chemistry must, therefore, for a time be dormant. Perhaps a "rest period" would greatly benefit those sciences themselves.

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QUOTATIONS

SCIENCE IN THE NEWS

In the remarks preliminary to his recent address on cosmic rays Dr. Robert A. Millikan expressed some views about newspapers, his fellow-scientists and the present generation. It is almost inevitable, he said, that any new field in which there are many workers should appear to the public, and even to many of the workers themselves, to be in a state of hopeless confusion. This, he thought, is because the individual workers, unrestrained in a new field by a body of established fact, tend to set up hypotheses that seem to fit their particular experiments or their particular theories, and are themselves ignorant of, or at least incredulous about, the findings of others, so that "the public soon loses itself in a maze of incompletely understood and apparently contradictory statements and opinions, and knows not whom and what to believe." This situation, he continued, "is not improved by the existence of the daily newspaper, which, as its very name implies, is under a greater pressure to find for its pages something that is new rather than something that is true." He ventured the prediction that

the present age, because of "its craze for the new regardless of the true," will be looked back upon by our grandchildren with "amazement and ridicule."

It is unusual to hear the daily newspapers criticized for printing too much news about science. The more common criticism is that they devote a disproportionate space to scandals, murders and sports, and neglect the world's constructive cultural achievements. Dr. Millikan's criticism serves to direct attention to the increasing amount of attention that the newspapers have been devoting to science, which implies a growing interest in science on the part of their readers.

Dr. Millikan ought to be the last man to deplore such a development. His statements seem to indicate that he does not believe that the newspapers ought to confuse their readers by printing news about controversial hypotheses, but this is to imply either that the newspapers should themselves set up as judges of the truth of scientific theories, refusing to print anything about new theories that they did not agree with, or that they should not print any scientific news until it had got past the controversial stage. It would be very difficult to say when this point had been reached, if it ever was, and the probable result would be to cut

¹ SCIENCE, 80: 2085, December 14, 1934.